

WHAT IS CLAIMED IS:

1. A wedge-operated disc brake apparatus comprising:
 - a piston accommodated within a cylinder portion to be rotatable about and slidable along an axial direction of the piston and adapted to push a brake pad toward a brake rotor;
 - an actuator for generating a linear brake-actuating input;
 - a wedge transmission mechanism which is connected to the actuator so as to be driven thereby and to convert the linear brake-actuating input into a brake-actuating output in the axial direction of the piston, the brake-actuating output being transmitted to the piston so as to cause the piston to push the brake pad toward the brake rotor; and
 - an automatic gap adjusting mechanism for automatically adjusting a gap between the brake pad and the brake rotor during a non-braking state, wherein the automatic gap adjusting mechanism includes
 - an adjusting wheel having ratchet teeth on an outer circumference thereof and provided on an outer circumference of an end portion of the piston, the end portion being toward the wedge transmission mechanism,
 - an adjusting nut provided on an inner circumference of the piston,
 - an adjusting lever having a pawl which is formed on an end of the lever and is engaged with the ratchet teeth of the adjusting wheel, the adjusting lever being rotated via a spring by means of the brake-actuating input so as to rotate the adjusting wheel, and
 - an adjusting bolt threadingly engaged with the adjusting nut, the adjusting bolt being engaged with the brake pad to thereby be prevented from rotating.

2. A wedge-operated disc brake apparatus according to claim 1, wherein the spring is a tension coil spring disposed in such a manner that a direction of tension of the spring becomes approximately parallel to a plane approximately perpendicular to an axis of a support pin which rotatably supports the adjusting lever.